AUTHOR INDEX, VOLUME 68

ADAMS, D. D., H. D. PURVES AND N. E. SIRETT. The Response of Hypophysectomized Mice to Injections of Human Serum Containing Long-Acting Thyroid Stimulator, 154

AHN, C. S. AND I. N. ROSENBERG. Non-Iodide Radioactivity in Commercial Solutions of Sodium Radio-Iodide (I^{131}), 50

ALEXANDER, NICHOLAS M. The Mechanism of Iodination Reactions in Thyroid Glands, 671

ALTSCHULE, MARK D., see MEYER, CLAUDE J., 795

ANDERSON, L. L., see DUNCAN, G. W., 199

ANTONIADES, HARRY N. Studies on the State of Insulin in Blood: The State and Transport of Insulin in Blood, 7

ANTONIADES, HARRY N. AND KARE GUNDERSEN. Studies on the State of Insulin in Blood: Dissociation of Purified Human Blood Insulin Complex(es) by Incubation with Adipose Tissue Extracts *in Vitro*, 36

ARNOLD, AARON, see BEYLER, ARTHUR L., 987

ASHMORE, JAMES, FRANCIS STRICKER, WILLIAM C. LOVE AND GRACE KILSHEIMER. Cortisol Stimulation of Glycogen Synthesis in Fasted Rats, 599

ASPINALL, RICHARD L., ROLAND K. MEYER AND M. APPASWAMI RAO. Effect of Various Steroids on the Development of the Bursa Fabricii in Chick Embryos, 944

ASTWOOD, E. B., see HOLLENBERG, C. H., 589

ATKINSON, WILLIAM B., see SWIGART, RICHARD H., 643

AU, WILLIAM Y. W., see RAISZ, LAWRENCE G., 783

AULSEBROOK, KENNETH A. Effect of Vasopressin on Sodium Transfer by Rat Colon *in Vitro*, 1063

AXELROD, LEONARD R. AND NICHOLAS T. WERTHESSEN. Blood as a Site for the Conversion of the Steroid Hormones, 180

BALDRATTI, G., see HECHT-LUCARI, G., 543

BALTZ, BARBARA E., see WISEMAN, RALPH, JR., 354

BARKER, S. B., see PITTMAN, CONSTANCE S., 248

BARRACLOUGH, CHARLES A. Production of Anovulatory, Sterile Rats by Single Injections of Testerone Propionate, 62

BARRACLOUGH, CHARLES A. AND ROGER A. GORSKI. Evidence that the Hypothalamus is Responsible for Androgen-Induced Sterility in the Female Rat, 68

BAYER, RAYMOND B., see GLENN, E. MYLES, 386

BEER, FRANCIS, see MASTROIANNI, LUIGI, JR., 92

BERLINER, DAVID L., NANCY KELLER AND THOMAS F. DOUGHERTY. Tissue Retention of Cortisol and Metabolites Induced by ACTH: An Extra-Adrenal Effect, 621

BERLINER, DAVID L., see STEVENS, WALTER, 875

BERN, SERAPHINE, see RUDMAN, DANIEL, 273

BEST, G. R., see KNOBIL, E., 723

BEYLER, ARTHUR L., GORDON O. POTTS AND AARON ARNOLD. Influence of Molecular Unsaturation on Hormonal Activity Pattern of Certain Heterocyclic Steroids, 987

BLUMBERG, B. S., L. FARER, J. E. RALL AND J. ROBBINS. Thyroxine—Serum Protein Complexes: Two-Dimension Gel and Paper Electrophoresis Studies, 25

BOWERMAN, A. M., see DUNCAN, G. W., 199

BOWMAN, BARBARA J., see GLENN, E. MYLES, 386

BRADBURY, JAMES T. Direct Action of Estrogen on the Ovary of the Immature Rat, 115

BRADBURY, JAMES T., see JAGGARD, JEANNE, 759

BRANCACCIO, A., see JACONO, G., 450

BRIZZE, K. R. AND K. B. EIK-NES. Effects of Extracts of Hypothalamic Nuclei and Cerebral Cortex on ACTH Stimulating Activity in the Dog, 166

BRODER, IRVIN, BERNARD LANGER, CALVIN EZRIN AND WILLIAM J. HORSEY. The Metabolic Rate and Serum Protein-Bound Iodine of Adrenalecto-

mized Rabbits Maintained on Reduced Cortisone Therapy, 559

Brody, Philip N., see Lehrman, Daniel S., 507

Brody, Sam and Nils Wiqvist. Ovarian Hormones and Uterine Growth: Effects of Estradiol, Progesterone and Relaxin on Cell Growth and Cell Division in the Rat Uterus, 971

Brown, J. Richard, see Farnsworth, Wells E., 978

Burgers, A. C. J. Occurrence of Three Electrophoretic Components with Melanocyte-Stimulating Activity in Extracts of Single Pituitary Glands from Ungulates, 698

Calhoun, David W., see Edgren, Richard A., 633

Campbell, P. J., see Hellbaum, A. A., 144

Chen, Philip S., Jr., see Terepka, A. Raymond, 996

Chow, Bacon F., see Okuda, Kunio, 607

Clewe, Thomas H., see Mastroianni, Luigi, Jr., 92

Cohen, Edward, see Frieden, Edward H., 862

Cohen, Richard B. The Histochemical Distribution and Metabolic Significance of Glucose-6-Phosphate Dehydrogenase Activity, Glycogen and Lipid in the Stimulated Adrenal Cortex, 710

Condon, George P., see Levitz, Mortimer, 825

Corrigan, James J., Jr., see Hess, Melvin, 548

Coulombre, Alfred J., see Forbes, Thomas R., 858

Coulombre, Jane, see Forbes, Thomas R., 858

Coye, Robert D. and James Donkle. Renal Excretion of Protein in Adrenalectomized Dogs Treated with Various Adrenal Cortical Hormones, 950

Cozens, Dorothy A. and Marjorie M. Nelson. Effects of Ovariectomy on the Follicle-Stimulating and Interstitial-Cell-Stimulating Content of the Anterior Pituitary of the Rat, 767

Craig, Lyman, see Rasmussen, Howard, 1051

Csapo, Arpad, see Kuriyama, Hiroshi, 1010

Csapo, A. I., see Marshall, J. M., 1026

Curtis, S. J., see Granner, D. K., 1056

D'Alessandro, B., see Jacono, G., 450

Dancis, Joseph, see Levitz, Mortimer, 825

Deane, Helen Wendler, see Lobel, Bertha L., 232

Deiss, William P., Jr., 484

De Luca, R., see Jacono, G., 450

de Wied, D. The Significance of the Antidiuretic Hormone in the Release Mechanism of Corticotropin, 956

Diczfalusy, E., see Menini, E., 492

Dinerstein, Jenny and Jonathan T. Lanman. Lack of a Direct Adrenotropic Action of Chorionic Gonadotropin on the Rat Adrenal, 164

Donkle, James, see Coye, Robert D., 950

Dorfman, Ralph I., Fred A. Kincl and Howard J. Ringold. Anti-Estrogen Assay of Neutral Steroids Administered by Subcutaneous Injection, 17

Dorfman, Ralph I., Fred A. Kincl and Howard J. Ringold. Anti-Estrogen Assay of Neutral Steroids Administered by Gavage, 43

Dorfman, Ralph I., Fred A. Kincl and Howard J. Ringold. Biological Activity of 9α,11β-Dihalo Steroids, 616

Dorfman, Ralph I., see Rooks, Wendell H., II, 838

Dougherty, Thomas F., see Berliner, David L., 621

Dougherty, Thomas F., see Stevens, Walter, 875

Dowdy, A., see Ganong, W. F., 169

Duncan, G. W., A. M. Bowerman, L. L. Anderson, W. R. Hearn and R. M. Melampy. Factors Influencing *In Vitro* Synthesis of Progesterone, 199

Edgren, Richard A. and David W. Calhoun. Estrogen Antagonisms: The Effects of Various Steroids on Estrone-Induced Uterine Growth in Spayed Rats, 633

Edgren, Richard A. Estrogen Antagonisms: Further Remarks on Temporal Aspects of Steroid Block of Estrogen-Induced Vaginal Smear Changes in Mice, 639

Egdahl, Richard H. Corticosteroid Secretion Following Caval Constriction in Dogs with Isolated Pituitaries, 226

Egdahl, Richard H. Cerebral Cortical Inhibition of Pituitary-Adrenal Secretion, 574

EGUCHI, YASUNOBU. Atrophy of the Fetal Mouse Adrenal Following Decapitation in Utero, 716

EIK-NES, K. B., see BRIZZEE, K. R., 166

EISENSTEIN, ALBERT B. AND INGE STRACK. Effect of Sodium Deficiency on Secretion of Hormones by the Rat Adrenal Cortex, 121

ELLIS, STANLEY. Bioassay of Luteinizing Hormone, 334

EVANS, EDWARD S., see ROSENBERG, LAWSON L., 1

EVANS, E. S., L. L. ROSENBERG AND M. E. SIMPSON. Erythropoietic Response to Calorigenic Hormones, 517

EZRIN, CALVIN, see BRODER, IRVIN, 559

FARER, L., see BLUMBERG, B. S., 25

FARNSWORTH, WELLS E. AND J. RICHARD BROWN. Androgen on Prostate Biosynthetic Reactions, 978

FAVOUR, CUTTING B., see RAUCH, HELEN C., 375

FAVOUR, CUTTING B., see ROBERTSON, O. H., 733

FERGUSON, ROBERT B. AND DAVID GLICK. Quantitative Histochemical Distribution of Biotin in the Rat Adrenal and Lack of Response to ACTH, 431

FIALA, S. AND WALTER GLINSMANN. Acid Soluble Ribonucleotides in Adrenal Tissue After Hormonal Stimulation, 479

FINERTY, J. C., see HELLBAUM, A. A., 144

FISCHER, DIANA B., see HAMOLSKY, MILTON W., 662

FORBES, THOMAS R., ALFRED J. COULOMBRE AND JANE COULOMBRE. Inactivation of Progesterone by Cellular Fractions of Rat Liver and Kidney *In Vitro*, 858

FRANKLIN, M. J. AND E. KNOBIL. The Influence of Hypophysectomy and of Growth Hormone Administration on the Oxidation of Palmitate-1-C^{14} by the Unanesthetized Rat, 867

FREEDBERG, A. STONE, see HAMOLSKY, MILTON W., 662

FRIEDEN, EDWARD H., EDWARD H. COHEN AND ANNABEL A. HARPER. The Effects of Steroid Hormones Upon Amino Acid Incorporation into Mouse Kidney Homogenates, 862

GABRIELSON, EILEEN, see NISHIKAWARA, MARGARET T., 855

GALTON, VALERIE ANNE AND SIDNEY H. INGBAR. The Influence of Reserpine, Serotonin and Metabolites of Tryptophane on the Degradation of Thyroxine and Its Derivatives, 435

GANONG, W. F., A. M. NOLAN, A. DOWDY AND J. A. LUETSCHER. The Effect of Hypothalamic Lesions on Adrenal Secretion of Cortisol, Corticosterone, 11-Desoxycortisol and Aldosterone, 169

GIROLAMO, MARIO DI, see RUDMAN, DANIEL, 273

GIROLAMO, MARIO DI, DANIEL RUDMAN, MARIA B. REID AND FLOYD SEIDMAN. Effect of Pituitary Hormones upon Serum Free Fatty Acid Concentration of the Rabbit, 457

GLASS, ROBERT, JANET LORING, JOYCE SPENCER AND CLAUDE VILLEE. The Estrogenic Properties *In Vitro* of Diethylstilbestrol and Substances Related to Estradiol, 327

GLASSER, STANLEY R., see IZZO, JOSEPH L., 189

GLENISTER, DAVID W. AND F. EUGENE YATES. Sex Difference in the Rate of Disappearance of Corticosterone-4-C^{14} from Plasma of Intact Rats: Further Evidence for the Influence of Hepatic Δ^4-Steroid Hydrogenase Activity on Adrenal Cortical Function, 747

GLENN, E. MYLES, BARBARA J. BOWMAN, RAYMOND B. MAYER AND CURTIS E. MEYER. Hydrocortisone and Some of Its Effects on Intermediary Metabolism: *In Vivo* Studies, 386

GLICK, DAVID, see FERGUSON, ROBERT B., 431

GLICK, DAVID, see GREENBERG, LEONARD J., 1045

GLINSMANN, WALTER, see FIALA, S., 479

GOLDBERG, LAWRENCE G., see SWIGART, RICHARD H., 643

GOODMAN, H. M., see KNOBIL, E., 723

GORSKI, ROGER A., see BARRACLOUGH, CHARLES A., 68

GRANNER, D. K., S. J. CURTIS AND N. S. HALMI. Response of the Thyroidal Iodide Pump in Hypophysectomized Rats on a Low Iodine Diet to the Plasma of Goitrous Rats, 1066

GRAVES, T., see MCCANN, S. M., 873

GREENBERG, LEONARD J. AND DAVID GLICK. Quantitative Histological Distribution of Certain Phosphorus Com-

pounds in the Rat Adrenal in Various Functional States, 1045
Greer, Monte, A., see Iino, Shiro, 253
Greer, Monte A., see Iino, Shiro, 582
Grishman, Edith, see Teodoru, Constantin V., 208
Gundersen, Kare, see Antoniades, Harry N., 36
Guttenberg, Irving. Plasma Levels of "Free" Progestin During the Estrous Cycle in the Mouse, 1008

Halmi, N. S., see Peters, Bruce H., 844
Halmi, N. S., see Granner, D. K., 1066
Hamolsky, Milton W., Myron Stein, Dina B. Fischer and A. Stone Freedberg. Further Studies of Factors Affecting the Plasma Protein-Thyroid Hormone Complex, 662
Hane, Satoshi, see Robertson, O. H., 733
Harper, Annabel A., see Frieden, Edward H., 862
Harrison, Timothy S. Some Factors Influencing Thyrotropin Release in the Rabbit, 466
Hausmann, Ernest. A Revaluation of the Effect of Parathyroid Hormone on Mucopolysaccharide Metabolism, 722
Hays, R. L. and K. A. Kendall. Maintenance of Pregnancy with Prolactin or Progesterone in Rats on a Sucrose Diet, 177
Hearn, W. R., see Duncan, G. W., 199
Hecht-Lucari, G., G. Baldratti and G. Sala. Interactions on the Uterus Between Progesterone and Some of Its C-21 Metabolites in the Immature Rabbit, 543
Hellbaum, A. A., L. G. McArthur, P. J. Campbell and J. C. Finerty. The Physiological Fractionation of Pituitary Gonadotropic Factors Correlated with Cytological Changes, 144
Henneman, Dorothy H. and William C. Shoemaker. Effect of Glucagon and Epinephrine on Regional Metabolism of Glucose, Pyruvate, Lactate, and Citrate in Normal Conscious Dogs, 889
Hess, Melvin, James J. Corrigan, Jr. and John A. Hodak. The Effects of Nucleic Acids on Pituitary ACTH Content, 548
Hilton, James G., Oscar R. Kruesi, Relja I. Nedeljkovic and Louis F. Scian. Adreno-Cortical and Medullary Responses to Adenosine 3′,5′-Monophosphate, 908
Hodak, John A., see Hess, Melvin, 548
Hollenberg, C. H., M. S. Raben and E. B. Astwood. The Lipolytic Response to Corticotropin, 589
Holmes, Leila B., see Johnston, C. Conrad, Jr., 484
Holub, Donald A., Fred H. Katz and Joseph W. Jailer. Inhibition by 6-Methyl-17-Acetoxy-Progesterone of ACTH Synthesis and Release in the Rat, 173
Hopsu, Väinö K., see Talanti, S., 184
Horsey, William J., see Broder, Irvin, 559
Hyde, Jane E., see Slusher, Margaret A., 773

Iino, Shiro and Monte A. Greer. Thyroid Function in the Rat During Pregnancy and Lactation, 253
Iino, Shiro, Takashi Yamada and Monte A. Greer. Effect of Graded Doses of Propylthiouracil on Biosynthesis of Thyroid Hormones, 582
Ingbar, Sidney H., see Galton, Valerie Anne, 435
Isler, H., see Stux, M., 292
Izzo, Joseph L. and Stanley R. Glasser. Comparative Effects of Glucagon, Hydrocortisone and Epinephrine on the Protein Metabolism of the Fasting Rat, 189

Jacono, G., A. Brancaccio, B. D'Alessandro and R. de Luca. Effect of Aldosterone on the Renal Clearances of Free and Conjugated 17-Hydroxycorticosteroids, Total 17-Ketosteroids, Dehydroepiandrosterone and Androsterone, 450
Jaggard, Jeanne and James T. Bradbury. Local and Systemic Effects of Intratesticular Testosterone and Estradiol Pellets in Immature Rats, 759
Jailer, Joseph W., see Holub, Donald A., 173
Johnson, Marion E., see Rauch, Helen C., 375
Johnston, C. Conrad, Jr., William P. Deiss, Jr., and Leila B. Holmes. Effect of Parathyroid Extract on Bone Matrix Hexosamine, 484.
Jorgensen, Eugene C. and Kenneth Tsutsui. The Evaluation of DL-3′-Iodothyronine and DL-3′,5′-Diiodo-

thyronine as Thyroxine Antagonists in the Rat, 171

Jorgensen, Betty, see Terepka, A. Raymond, 996

Junkmann, K., see Suchowsky, G. K., 341

Kashiwa, Herbert K. Magnesium Deficiency in Intact, in Adrenalectomized and in Hypophysectomized Rats, 80

Katz, Fred H., see Holub, Donald A., 173

Keller, Nancy, see Berliner, David L., 621

Kendall, K. A., see Hays, R. L., 177

Khazin, Azmi and Seymour Reichlin. Thyroid Regulatory Function of Intra-Ocular Pituitary Transplants, 914

Kilsheimer, Grace, see Ashmore, James, 599

Kincl, Fred A., see Dorfman, Ralph I., 17

Kincl, Fred A., see Dorfman, Ralph I., 43

Kincl, Fred A., see Dorfman, Ralph I., 616

Kirkham, Keith E. Pituitary Gonadotrophins During the Ovulatory Cycle of the Domestic Fowl, 350

Kitay, Julian I. Sex Differences in Adrenal Cortical Secretion in the Rat, 818

Kittinger, George W., see Wexler, Bernard C., 545

Knigge, Karl M. Pituitary Ocular Graft Function in the Rat, with a Comparison of the Qualitative Nature of TSH from Normal Pituitaries and Ocular Grafts, 101

Knobil, E., G. R. Best and H. M. Goodman. The Hypoglycemic Action of Simian and Bovine Growth Hormone in Hypophysectomized Rhesus Monkeys, 723

Knobil, E., see Franklin, M. J., 867

Kovacic, Nada and John A. Loraine. Studies on the Biological Activity of Gonadotropic Extracts Prepared from Human Postmenopausal Urine, 356

Kraicer, J., see Logothetopoulos, J., 417

Kroc, Robert L., see Stasilli, Neil R., 1068

Kruesi, Oscar R., see Hilton, James G., 908

Krupp, Marcus A., see Robertson, O. H., 733

Kuriyama, Hiroshi and Arpad Csapo. A Study of the Parturient Uterus with the Microelectrode Technique, 1010

Lacroix, E., see Leusen, I., 719

Langer, Bernard, see Broder, Irvin, 559

Lanman, Jonathan T., see Dinerstein, Jenny, 164

Lazo-Wasem, E. A., see Meyer, Claude J., 795

Leblond, C. P., see Stux, M., 292

Lehrman, Daniel S., Philip N. Brody and Rochelle P. Wortis. The Presence of the Mate and of Nesting Material as Stimuli for the Development of Incubation Behavior and for Gonadotropin Secretion in the Ring Dove (*Streptopelia risoria*), 507

Leusen, I. and E. Lacroix. Changes in Osmolarity in the Cerebral Ventricles and Diuresis, 719

Levitz, Mortimer, George P. Condon and Joseph Dancis. Sulfurylation of Estrogens by the Human Fetus, 825

L'Heureux, Maurice V., see Reichert, Leo E., Jr., 1136

Li, Choh Hao, see Moudgal, N. R., 704

Lobel, Bertha L., Robert M. Rosenbaum and Helen Wendler Deane. Enzymic Correlates of Physiological Regression of Follicles and Corpora Lutea in Ovaries of Normal Rats, 232

Logothetopoulos, J., B. B. Sharma and J. Kraicer. Effects Produced in Rats by the Administration of 6α-Methyl-17α-Hydroxyprogesterone Acetate from Birth to Maturity, 417

Loomis, Maurice E., see Rauch, Helene C., 375

Loraine, John A., see Kovacic, Nada, 356

Loring, Janet, see Glass, Robert, 327

Loring, Janet, Joyce Spencer and Claude Villee. Some Effects of Androgens on Intermediary Metabolism in Muscle, 501

Love, William C., see Ashmore, James, 599

Luetscher, J. A., see Ganong, W. F., 169

Maloof, F. and M. Soodak. Thioacetamide, an Anti-Thyroid Compound, 125

Maloof, F. and M. Soodak. The Relationship of Uracil, Orotic Acid and

Thiouracil in Mammalian Thyroid Tissue, 831

Marshall, J. M. and A. I. Csapo. Hormonal and Ionic Influences on the Membrane Activity of Uterine Smooth Muscle Cells, 1026

Mason, Norman R. and Leo T. Samuels. Incorporation of Acetate-1-C^{14} Into Testosterone and 3β-Hydroxysterols by the Canine Testis, 899

Mastroianni, Luigi, Jr., Francis Beer, Urmila Shah and Thomas H. Clewe. Endocrine Regulation of Oviduct Secretions in the Rabbit, 92

McArthur, L. G., see Hellbaum, A. A., 144

McCann, S. M., see Taleisnik, S., 263

McCann, S. M., T. Graves and S. Taleisnik. The Effect of Lactation on Plasma LH, 873

McCann, S. M. and S. Taleisnik. The Effect of Hypothalamic Extract on the Plasma Luteinizing Hormone (LH) Activity of the Estrogenized, Ovariectomized Rat, 1071

Melampy, R. M., see Dunan, G. W., 199

Menini, E. and E. Diczfalusy. Isolation and Identification of Sodium Estriol-3-Sulphate in Human Meconium, 492

Meyer, Claude J., Richard J. Wurtman, Mark D. Altschule and E. A. Lazo-Wasem. The Arrest of Prolonged Estrus in "Middle-Aged" Rats by Pineal Gland Extract, 795

Meyer, Curtis E., see Glenn, E. Myles, 386

Meyer, Roland K., see Aspinall, Richard L., 944

Miller, Benjamin F., see Wexler, Bernard C., 545

Monder, Carl and Abraham White. A New Colorimetric Method for the Quantitative Determination of Steroids Containing the 17α-Ketol Side Chain, 159

Morris, T. R. and A. V. Nalbandov. The Induction of Ovulation in Starving Pullets Using Mammalian and Avian Gonadotropins, 687

Moudgal, N. R. and Choh Hao Li. Production of Antibodies to Human Pituitary Growth Hormone in the Rat, 704

Munck, Allan. The Effect of Cortisol on Glucose Uptake by Rat Epididymal Fat Pads, 178

Munsick, Robert A., see Sawyer, Wilbur H., 215

Nalbandov, A. V., see Morris, T. R., 687

Nedeljkovic, Relja I., see Hilton, James G., 908

Nelson, Marjorie M., see Srebnik, Herbert H., 317

Nelson, Marjorie M., see Cozens, Dorothy A., 767

Nemith, Paul J., see Stasilli, Neil R., 1068

Nezamis, James E., see Robert, André, 932

Nezamis, James E., see Robert, André, 937

Nishikawara, Margaret T. Hexokinase and Phosphatase Activities of Intestinal Mucosa Following Thyroidectomy and Thyroid Administration, 850

Nishikawara, Margaret T. and Eileen Gabrielson. Hexokinase and Phosphatase Activities of the Intestinal Mucosa in Hypophysectomized and Thyroid-Treated Hypophysectomized Rats, 855

Nolan, A. M., see Ganong, W. F., 169

Ogawa, Yasunao and Gregory Pincus. Further Studies on Progestin Bioassay Using the Endometrial Response in the Rabbit, 680

Okuda, Kunio and Bacon F. Chow. The Thyroid and Absorption of Vitamin B_{12} in Rats, 607

Pastan, Ira. Certain Functions of Isolated Thyroid Cells, 924

Peters, Bruce H. and N. S. Halmi. Changes in the Thyroidectomy Cells of the Rat Pituitary Under the Influence of Large Doses of Triiodothyronine, 844

Pincus, Gregory, see Ogawa, Yasunao, 680

Pittman, Constance S., Hiroshi Shida and S. B. Barker. Effects of Methyl Group Substitution for Iodine on Metabolic Activity of Thyroxine, Triiodothyronine and Tetraiodothyropropionic Acid, 248

Pitt-Rivers, Rosalind and J. E. Rall. Radioiodine Equilibrium Studies of Thyroid and Blood, 309

Potts, Gordon O., see Beyler, Arthur L., 987

PURVES, H. D., see ADAMS, D. D., 154

RABEN, M. S., see HOLLENBERG, C. H., 589

RACE, GEORGE J. AND HSIAO MAY WU. Adrenal Cortex Functional Zonation in the Whale (*Physeter Catadon*), 156

RAISZ, LAWRENCE G., WILLIAM Y. W. AU AND JAY TEPPERMAN. Effect of Changes in Parathyroid Activity on Bone Metabolism *in Vitro*, 783

RALL, J. E., see BLUMBERG, B. S., 25

RALL, J. E., see PITT-RIVERS, ROSALIND, 309

RAO, M. APPASWAMI, see ASPINALL, RICHARD L., 944

RASMUSSEN, HOWARD AND LYMAN CRAIG. The Isolation of Arginine Vasotocin from Fish Pituitary Glands, 1051

RAUCH, HELEN C., MAURICE E. LOOMIS, MARION E. JOHNSON AND CUTTING B. FAVOUR. *In Vitro* Suppression of Polymorphonuclear Leukocyte and Lymphocyte Glycolysis by Cortisol, 375

RAUDA, VIJA, see STEINER, DONALD F., 809

REICHERT, LEO E., JR. AND MAURICE V. L'HEUREUX. Fractionation of Plasma Parathyroid Hormone Activity, 1036

REICHLIN, SEYMOUR, see KHAZIN, AZMI, 914

REID, MARIA B., see RUDMAN, DANIEL, 273

REID, MARIA B., see GIROLAMO, MARIO DI, 457

RENNELS, EDWARD G., see WALKER, BRUCE E., 365

RINGLER, IRA. The Composition of Rat Uterine Luminal Fluid, 281

RINGOLD, HOWARD J., see DORFMAN, RALPH I., 17

RINGOLD, HOWARD J., see DORFMAN, RALPH I., 43

RINGOLD, HOWARD J., see DORFMAN, RALPH I., 616

ROBBINS, J., see BLUMBERG, B. S., 25

ROBERT, ANDRÉ AND JAMES E. NEZAMIS. Antiphlogistic Property of Desoxycorticosterone after Partial Hepatectomy, Adrenalectomy, Force-Feeding and KCl Ingestion in the Rat, 932

ROBERT, ANDRÉ AND JAMES E. NEZAMIS. Antiphlogistic Property of Certain 11-Desoxy Steroids After Systemic Administration, 937

ROBERTSON, O. H., MARCUS A. KRUPP, CUTTING B. FAVOUR, SATOSHI HANE AND SYDNEY F. THOMAS. Physiological Changes Occurring in the Blood of the Pacific Salmon (*Oncorhynchus tshawytscha*) Accompanying Sexual Maturation and Spawning, 733

ROOKS, WENDELL H., II AND RALPH I. DORFMAN. Estrogen Radioprotection in Mice, 838

ROSENBAUM, ROBERT M., see LOBEL, BERTHA L., 232

ROSENBERG, I. N., see AHN, C. S., 50

ROSENBERG, LAWSON L., EDWARD S. EVANS AND MIRIAM E. SIMPSON. A Simple Method for the Purification of Sheep ACTH, 1

ROSENBERG, L. L., see EVANS, E. S., 517

RUDMAN, DANIEL, MARIA B. REID, FLOYD SEIDMAN, MARIO DI GIROLAMO, ARTHUR R. WERTHEIM AND SERAPHINE BERN. Purification and Properties of a Component of the Pituitary Gland Which Produces Lipemia in the Rabbit, 273

RUDMAN, DANIEL, see GIROLAMO, MARIO DI, 457

RUEGAMER, W. R. AND F. R. SILVERMAN. Thyroxine Analogues and Cholesterol Metabolism: The Prevention and Reversal of Elevated Liver Cholesterol and Lipid Concentrations in the Cholesterol Fed Rat by Dietary 3,5 Diiodothyroacetic Acid, 564

SALA, G., see HECHT-LUCARI, 543

SAMUELS, LEO T., see MASON, NORMAN R., 899

SAVARD, KENNETH. The Estrogens of the Pregnant Mare, 411

SAWYER, WILBUR H., ROBERT A. MUNSICK AND H. B. VAN DYKE. Pharmacological Characteristics of the Active Principles in Neurohypophysial Extracts from Several Species of Fishes, 215

SCIAN, LOUIS F., see HILTON, JAMES G., 908

SEIDMAN, FLOYD, see RUDMAN, DANIEL, 273

SEIDMAN, FLOYD, GIROLAMO, MARIO DI, 457

SHAH, URMILA, see MASTROIANNI, LUIGI, JR., 92

SHARMA, B. B., see LOGOTHETOPOULOS, J., 417

SHELLABARGER, CLAIRE J. AND J. R. TATA. Effect of Administration of Human

Serum Thyroxine-Binding Globulin on the Disappearance Rates of Thyroid Hormones in the Chicken, 1056

Shida, Hiroshi, see Pittman, Constance S., 248

Shoemaker, William C., see Henneman, Dorothy H., 889

Silverman, F. R., see Ruegamer, W. R., 564

Simpson, Miriam E., see Rosenberg, Lawson L., 1

Simpson, Miriam E., see Srebnik, Herbert H., 317

Simpson, M. E., see Evans, E. S., 517

Simpson, Miriam E., see Woods, Marion C., 647

Sirett, N. E., see Adams, D. D., 154

Slusher, Margaret A. and Jane E. Hyde. Inhibition of Adrenal Corticosteroid Release by Brain Stem Stimulation in Cats, 773

Smith, Philip E. Postponed Homotransplants of the Hypophysis into the Region of the Median Eminence in Hypophysectomized Male Rats, 130

Sobel, Harold J. The Localization of Acid Phosphatase Activity in the Rat Pituitary and Thyroid Glands, and Its Relation to Secretory Activity, 801

Soodak, M., see Maloof, F., 831

Soodak, M., see Maloof, F., 125

Spencer, Joyce, see Glass, Robert, 327

Spencer, Joyce, see Loring, Janet, 501

Srebnik, Herbert H., Marjorie M. Nelson and Miriam E. Simpson. Follicle-Stimulating Hormone (FSH) and Interstitial-Cell Stimulating Hormone (ICSH) in Pituitary and Plasma of Intact and Ovariectomized Protein-Deficient Rats, 317

Stasilli, Neil R., Robert L. Kroc and Paul J. Nemith. Effects of Thyroxine and Triiodothyropropionic Acid on Growth of Thiouracil-Treated Rats, 1068

Stein, Myron, see Hamolsky, Milton W., 662

Steiner, Donald F., Vija Rauda and Robert H. Williams. Severe Ketoacidosis in the Alloxan Diabetic Rat, 809

Sterling, Kenneth and Milton Tabachnick. Paper Electrophoretic Demonstration of Thyroxine-Binding Prealbumin Fraction in Serum, 1073

Stevens, Walter, David L. Berliner and Thomas F. Dougherty. Conjugation of Steroids by Liver, Kidney and Intestine of Mice, 875

Storey, E. Cortisone-Induced Bone Resorption in the Rabbit, 533

Strack, Inge, see Eisenstein, Albert B., 121

Stricker, William C., see Ashmore, James, 599

Stux, M., B. Thompson, H. Isler and C. P. Leblond. The "Light Cells" of the Thyroid Gland in the Rat, 292

Suchowsky, G. K. and K. Junkman. A Study of the Virilizing Effect of Progestogens on the Female Rat Fetus, 341

Swigart, Richard H., Lawrence G. Goldberg and William B. Atkinson. Glycogen in the Uterus of Alloxan-Diabetic Rats, 643

Tabachnick, Milton, see Sterling, Kenneth, 1073

Talanti, S. and Väinö K. Hopsu. Leucine Aminopeptidase in the Gastric Mucosa of the Adrenalectomized Rat, 184

Taleisnik, S. and S. M. McCann. Effects of Hypothalamic Lesions on the Secretion and Storage of Hypophysial Luteinizing Hormone, 263

Taleisnik, S., see McCann, S. M., 873

Taleisnik, S., see McCann, S. M., 1071

Tata, J. R., see Shellabarger, Claire J., 1056

Teodoru, Constantin V. and Edith Grishman. Alterations of the Interscapular Brown Fat (Hibernating Gland) Adrenals and Thymus During Pregnancy in Hamsters, 208

Tepperman, Jay, see Raisz, Lawrence G., 783

Terepka, A. Raymond, Philip S. Chen, Jr. and Betty Jorgensen. The Nature of Hytakerol® (AT-10) and Its Comparison With Crystalline Dihydrotacysterol, 996

Thomas, Sydney F., see Robertson, O. H., 733

Thompson, B., see Stux, M., 292

Tsutsui, Kenneth, see Jorgensen, Eugene C., 171

Turner, Charles W., see Wada, Hiroshi, 1059

van Dyke, H. B., see Sawyer, Wilbur H., 215

VILLEE, CLAUDE, see GLASS, ROBERT, 327
VILLEE, CLAUDE, see LORING, JANET, 501

WADA, HIROSHI AND CHARLES W. TURNER. Interaction of Relaxin and Ovarian Steroid Hormones on Uterus of Rat, 1059
WALKER, BRUCE E. AND EDWARD G. RENNELS. Adrenal Cortical Cell Replacement in the Mouse, 365
WERTHEIM, ARTHUR R., see RUDMAN, DANIEL, 273
WERTHESSEN, NICHOLAS T., see AXELROD, LEONARD R., 180
WEXLER, BERNARD C., GEORGE W. KITTINGER AND BENJAMIN F. MILLER. *In Vitro* Aldosterone Production by Adrenals of Arteriosclerotic Rats, 545
WHITE, ABRAHAM, see MONDER, CARL, 159
WILLIAMS, ROBERT H., see STEINER, DONALD F., 809
WIQVIST, NILS, see BRODY, SAM, 971
WISEMAN, RALPH, JR. AND BARBARA E. BALTZ. Prevention of Insulin-I^{131} Adsorption to Glass, 354
WOODS, MARION C. AND MIRIAM E. SIMPSON. Characterization of the Anterior Pituitary Factor which Antagonizes Gonadotrophins, 647
WORTIS, ROCHELLE P., see LEHRMAN, DANIEL S., 507
WU, HSIAO MAY, see RACE, GEORGE J., 156
WURTMAN, RICHARD J., see MEYER, CLAUDE J., 795

YAMADA, TAKASHI, see IINO, SHIRO, 582
YATES, F. EUGENE, see GLENISTER, DAVID W., 747

SUBJECT INDEX, VOLUME 68

Adrenal cortex
magnesium deficiency in adrenalized and in hypophysectomized rats, 80
secretions as affected by sodium deficiency, 121
functional zonation in whales, 156
not stimulated by HCG, 164
secretion as affected by hypothalamic lesions, 169
effect of cortisol on glucose uptake by epididymal fat pads, 178
ablation effect on leucine aminopeptidase in gastric mucosa, 184
comparison of glucagon, hydrocortisone and epinephrine on protein metabolism, 189
alterations during pregnancy in hamsters, 208
secretion following caval constriction in dogs with isolated pituitaries, 226
cell replacement in mouse, 365
cortisol suppression of glycolysis by white blood cells *in vitro*, 375
effect on *in vivo* intermediary metabolism, 386
histochemical distribution of biotin, not affected by ACTH, 431
acid soluble ribonucleotides, 479
hormone effects on erthyropoietic and calorigenic response of hypophysectomized rats, 517
cortisone effect on bone resorption, 533
the metabolic rate and serum protein-bound iodine of adrenalectomized rabbits maintained on reduced cortisone therapy, 559
cerebral cortical inhibition of ACTH secretion, 574
cortisol stimulation of glycogen synthesis in fasted rat, 599
hormones, retention in tissues as influenced by ACTH, 621
histochemical distribution of glucose-6-phosphate dehydrogenase, glycogen and lipid as influenced by adrenocortical stimulation, 710
atrophy following fetal decapitation, 716
further evidence for influence of hepatic Δ^4-steroid hydrogenase activity on function of, 747
inhibition by brain stem stimulation, 773
sex differences in secretory functions of, 818
hormones and amino acid incorporation by kidney homogenates, 862
responses to adenosine 3′,5′-monophosphate, 908
hepatectomy, adrenalectomy, force-feeding and KCl ingestion in the rat, 932
antiphlogistic property of certain 11-desoxy steroids after systemic administration, 937
renal excretion of protein in adrenalectomized dogs treated with various adrenal cortical hormones, 950

Adrenal medulla
comparison of glucagon, hydrocortisone and epinephrine on protein metabolism, 189
and glucagon, effect on regional metabolism in dogs, 889
response to adenosine 3′,5′-monophosphate, 908

Androgens
sterility following single injection of testosterone, 62
some effects on intermediary metabolism in muscle, 501
local and systemic effects in immature rats, 759
and amino acid incorporation in kidney homogenates, 862
incorporation of acetate-1-C^{14} into testosterone and 3β-hydroxysterols by dog testis, 899
effect on development of bursa of Fabricius in chick, 944
effect on prostate biosynthetic reactions, 978

Aldosterone
secretion as influenced by hypothalmic lesions, 169
effect on renal clearance of free and conjugated steroids, 450
production *in vitro* by adrenals of arteriosclerotic rats, 545

Comparative endocrinology
adrenal cortex, functional zonation in whale, 156
pharmacological characteristics of the active principles in neurohypophysial extracts from several species of fish, 215
pituitary gondotropins during ovulatory cycle of domestic fowl, 350
Induction of ovulation in starving pullets using mammalian and avian gonadotropins, 687
production of antibodies to human pituitary GH in rat, 704
hypoglycemic action of simian and bovine GH in hypophysectomized monkeys, 723
physiological changes in blood of salmon during breeding season, 733

Corticotropin
purification of sheep, 1
secretion as affected by extract of hypothalmic nuclei, 166
inhibition of synthesis and release by 6-methyl-17-acetoxyprogesterone, 173
failure to effect distribution of biotin in rat adrenal cortex, 431
content as affected by injected nucleic acids, 548
the lipolytic response to, 589
inhibition of adrenal function by brain stem stimulation, 773
release mechanism as influenced by antidiuretic hormone, 956

Estrogens
direct action on immature rat ovary, 115
properties *in vitro*, of natural and synthetic, 327
of the pregnant mare, 411
isolation of sodium estriol-3-sulfate in meconium, 492
antagonistic influence of various steroids on estrone, 633
time factor in action of antagonists to, 639
local and systemic effect in immature rats, 759
sulfurylation by human fetus, 825
radioprotection in mice, 838
effect on cell growth and cell division in rat uterus, 971

Glucagon
effect on protein metabolism, comparisons with other hormones, 189
and epinephrine, effect on regional metabolism, 889

Growth hormone
antibodies to human GH in rat, 704
hypoglycemic action of simian and bovine preparations in hypophysectomized monkeys, 723
on oxidation of palmitate-1-C^{14}, 867

Human chorionic gonadotropin no direct action on rat adrenal, 164

Hypophysis
magnesium deficiency in absence of, 80
ocular graft and TSH function, 101
postponed transplantation to median eminence in hypophysectomized rat, 130
physiological fractionation of gonadotropic factors and cytological changes in, 144
adrenal function following caval constriction in dogs with isolated pituitaries, 226
LH secretion and release as affected by hypothalamic lesions, 263
purification of a component which produces lipemia in rabbits, 273
gonadotropins in gland and plasma of intact and gonadectomized protein-deficient rats, 317
bioassay of luteinizing hormone, 334
gonadotropins during ovulatory cycle in hens, 350
gonadotrepic extracts of postmenopausal urine, 356
hormones, effect upon serum free fatty acid concentration in rabbit, 457
factors influencing TSH release in rabbit, 466
stimuli for incubation behavior and gonadotropin secretion in ring dove, 507
ACTH content as affected by injected nucleic acids, 548
gonadotropin antagonist, characterization of, 647
action of endogenous gonadotropins in starving pullets, 687
antibodies to human GH in rat, 704
hormonally induced changes in salmon during breeding season, 733
content of FSH and ICSH as influenced by gonadectomy, 767
acid phosphatase and relation to secretion, 801

effect of triiodothyronine on thyroidectomy cells in, 844
ablation and thyroid treatment influences gut mucosal enzymes, 855
influence in oxidation of palmitate-1-C^{14}, 867
LH in plasma affected by lactation, 873
intra-ocular transplants and thyroid function, 924
antidiuretic hormone in release of corticotropin, 956
effect of hypothalmic extract on plasma LH activity, 1071

Hypothalamus
and androgen-induced sterility, 68
extracts of nuclei on ACTH secretion in dog, 166
effect of lesions on adrenal cortex secretory functions, 169
effect of lesions on LH, 263
extracts, effect on plasma LH in estrogen-treated, ovariectomized rats, 1071

Hytakerol
its nature and comparison with dihydrotachysterol, 996

Insulin
state and transport in blood, 7
dissociation of blood insulin complex(es) by adipose tissue extracts, 36
adsorption to glass, prevention of, 354

Lactation
effect on thyroid function, 253
effect on plasma LH, 873

Melanocyte-stimulating hormones
electrophoretic separation of three components in ungulate pituitary extract, 698

Neurohypophysis
hormones of fish, pharmacological characteristics of, 215
controlled diuresis as affected by osmolarity in cerebral ventricles, 719
significance of antidiuretic hormone in release mechanism of corticotropin, 956
isolation of arginine vasotocin from fish pituitary, 1051
effect of vasopressin on sodium transfer by rat colon *in vitro*, 1063

Ovary
anovulatory sterility following single injection of testosterone, 62
hypothalamus and androgen-induced sterility, 68
factors influencing *in vitro* synthesis of progesterone, 199
histochemistry of regressing follicles and corpora lutea, 232

Oviduct
regulation of secretion in rabbit, 92

Pancreas
uterine glucogen in alloxan diabetes, 643
ketoacidosis in alloxan diabetes, 809

Parathyroid gland
extract on bone hexosamine, 484
effect on mucopolysaccharide metabolism revaluated, 722
effect on bone metabolism *in vitro*, 783
fractionation of plasma hormone activity of, 1095

Pineal gland
arrest of prolonged estrus in "middle-aged" rats by extracts of, 795

Pregnancy
changes in brown fat, adrenals and thymus in hamsters, 208
thyroid function during, 253
estrogens in mare during, 411

Progestins
maintenance of pregnancy in rats on sucrose diet, 177
factors influencing *in vitro* synthesis of, 199
viralizing effect of, in female rat fetuses, 341
injections of 6-Methyl-17-hydroxyprogesterone from birth to maturity, effect on several endocrine glands, 417
interactions of progesterone and C-21 metabolites in uterus of rabbit, 543
bioassay by endometrial response in rabbit, 680
inactivation of progesterone by cell fractions of liver and kidney *in vitro*, 858
effect on cell growth and cell division in rat uterus, 971
plasma levels of "free" progestin in mouse, 1006

Prolactin
maintenance of pregnancy in rats on sucrose diet, 177

Relaxin
effect on cell growth and cell division in rat uterus, 971
interaction with ovarian steroids on uterus of rat, 1059

Steroids
anti-estrogen assay of neutral steroids given subcutaneously, 17
anti-estrogen assay of neutral steroids given by gavage, 43
with 17-ketol side chain, a new method for determination of, 159
conversions of, blood as a site for, 180
biological activity of 9α,11β-dihalo steroids, 616
their influence on amino acid incorporation in mouse kidney homogenates, 862
conjugation by liver, kidney and intestine of mice, 875
influence of molecular unsaturation on activity pattern of certain heterocyclic steroids, 957

Thyroid gland
electrophoresis of thyroxine-serum protein complexes, 25
non-iodide radioactivity in commercial NaI^{131}, 50
thioacetamide, an anti-thyroid compound, 125
effect of Long-acting Thyroid Stimulator in hypophysectomized mice, 154
thyroxine antagonists, evaluation of, 171
metabolic activity as affected by methyl group substitution in iodine compounds, 248
function in rat during pregnancy and lactation, 253
"Light cells", 292
and blood: radioiodine equilibrium studies of, 309
degradation of thyroxine and its derivatives as influenced by reserpine, serotonin and metabolites of tryptophane, 435
erythropoietic response to calorigenic hormones, 517
metabolic rate and serum protein-bound iodine of adrenalectomized rabbits maintained on cortisone, 559
effect of 3,5-diiodothyroacetic acid liver cholesterol and lipid concentrations in cholesterol fed rat, 564
effect of graded doses of propylthiouracil on biosynthesis of thyroid hormones, 582
and absorption of vitamin B_{12} in rats, 607
factors affecting plasma protein-thyroid hormone complex, 662
mechanism of iodination reactions in, 671
acid phosphatase in, and relation to function of, 801
relationship of uracil, orotic acid and thiouracil in tissue of, 831
influence on hexokinase and phosphatase activity of intestinal mucosa, 850 and 855
regulatory function of intra-ocular pituitary grafts, 914
function of isolated cells of, 924
effect of human serum thyroxin-binding globulin on disappearance rates of thyroid hormones in the chicken, 1056
response of iodide pump in hypophysectomized rats on low iodine diet to the plasma of goitrous rats, 1066
effect of thyroxin and triiodothyropropionic acid on growth of thiouracil-treated rats, 1068
demonstration of thyroxin-binding prealbumin fraction in serum by paper electrophoresis, 1073

Thyroid-stimulating hormone
from normal pituitaries and ocular grafts, 101

Uterus
composition of luminal fluid, 281
interactions on, between progesterone and metabolites in immature rabbit, 543
glycogen in alloxan diabetic rats, 643
a study of parturient uterus with microelectrodes, 1010
hormonal and ionic influences on the muscle cells of, 1026
interaction of relaxin and ovarian steroid hormones on, 1059